

CLAIMS

1. (original) A multi-layered sports playing field for use over a base layer, said playing field including a top layer made of substantially artificial material simulating a natural playing surface such as grass and at least one padding layer positionable thereunder between said top layer and said base layer, said padding layer being porous and breathable to allow liquids and air to freely pass therethrough, said padding layer including a plurality of discrete beads of substantially elastic, resilient material wherein portions of adjacent beads abut one another and other portions of said adjacent beads are spaced from each other to create interstitial spaces therebetween and wherein substantially all of said adjacent beads are integrally joined together at the abutting portions thereof.
2. (original) The playing field of claim 1 wherein said beads are made of foam.
3. (original) The playing field of claim 2 wherein said foam is a closed cell foam.
4. (original) The playing field of claim 3 wherein said closed-cell foam is polypropylene.
5. (original) The playing field of claim 3 wherein said closed-cell foam is polyethylene.
6. (original) The playing field of claim 1 wherein said plurality of beads form at least two levels of beads wherein beads in the respective levels abut one another and are integrally joined to each other to integrally join said two levels of beads to each other.
7. (original) The playing field of claim 1 wherein said interstitial spaces are substantially uniformly distributed throughout the padding layer.

8. (original) The playing field of claim 1 wherein said interstitial spaces between said other portions of said adjacent beads are in fluid communication with one another.

9. (original) The playing field of claim 1 further including a substantially moisture-proof film layer positioned below said padding layer between said padding layer and said base layer.

10. (original) The playing field of claim 1 wherein said padding layer has a main body of said beads, said main body having upper and lower, substantially horizontal surfaces spaced from each other, said padding layer further including a plurality of feet members extending substantially vertically downwardly from the lower surface of said main body, said feet members being laterally spaced from one another and supporting said lower surface of said main body in a position spaced from said base layer to create a laterally extending water channel therebetween wherein water passing through the interstitial spaces between the beads of said main body flows into said water channel between said main body and said base layer.

11. (original) The playing field of claim 10 wherein said feet members are made of said beads.

12. (original) The playing field of claim 10 wherein said feet members are made of said beads and are integrally joined to said main body.

13. (original) The playing field of claim 10 wherein said feet members are substantially uniformly spaced from one another.

14. (original) The playing field of claim 10 wherein said feet members are substantially cylindrical in shape.

15. (original) The playing field of claim 10 further including a substantially

moisture-proof film layer positioned below the feet members of said padding layer between said feet members and said base layer wherein water passing through said main body of beads flows into said water channel between said main body and said base layer and laterally outwardly above said moisture proof film layer and said base layer.

16. (original) The playing field of claim 10 wherein said padding layer of beads is modular and includes a plurality of pieces releasably attachable to each other.

17. (original) The playing field of claim 16 wherein adjacent pieces have outer, border surfaces extending substantially vertically and at least some of said feet members have abutting portions on adjacent, abutting border surfaces of adjacent pieces.

18. (original) The playing field of claim 17 wherein said feet members have substantially the same shape and said abutting portions of said some feet members together form said shape.

19. (original) The playing field of claim 18 wherein said abutting portions of said some feet members together form said same shape and at least some of said abutting portions have different shapes from each other.

20. (original) The playing field of claim 17 wherein at least some of said border surfaces are rounded.

21. (original) The playing field of claim 17 wherein at least some of said border surfaces are flat.

22. (original) The playing field of claim 1 wherein said padding layer of beads is modular and includes a plurality of pieces releasably attachable to each other.

23. (original) The playing field of claim 22 wherein at least some of said pieces

have mating male and female portions interlocking adjacent pieces together.

24. (original) The playing field of claim 23 wherein each half of at least some of said pieces is a reversed, mirror image of the other half.

25. (original) The playing field of claim 1 wherein at least some of said beads of said padding layer form respective upper and lower surfaces of said padding layer wherein the beads of said upper and lower surfaces have substantially flat, coplanar surfaces.

26. (original) The playing field of claim 1 wherein said beads are made of closed cell foam and said padding layer has a density of about 5 to 10 pounds per cubic foot.

27. (original) The playing field of claim 1 wherein said padding layer thickness is about one half to three inches and said beads are substantially spherical with diameters of about 1/12 to 1/4 inches.

28. (original) The playing field of claim 1 wherein said beads are substantially spherical with substantially the same diameter.

29. (original) The playing field of claim 28 wherein said bead diameters are about 1/8 inch.

30. (original) The playing field of claim 28 wherein said bead diameters are about 1/12 inch.

31. (original) The playing field of claim 1 wherein the beads of said padding layer are made of closed cell foam and are about 80%-90% air.

32. (original) The playing field of claim 1 wherein the spaces between said other portions of said adjacent beads make up about 25% to 45% of the total volume of the padding layer.

33. (original) The playing field of claim 1 wherein the beads of said padding layer are made of closed cell foam and the total volume of the padding layer including the beads and the interstitial spaces between said other portions of said adjacent beads is about 85% to 95% air.

34. (original) The playing field of claim 1 wherein said top layer includes artificial blades of grass attached to a substantially porous mat positioned above said porous padding layer.

35. (original) The playing field of claim 1 further including a substantially porous fabric layer positioned below said padding layer between said padding layer and said base layer.